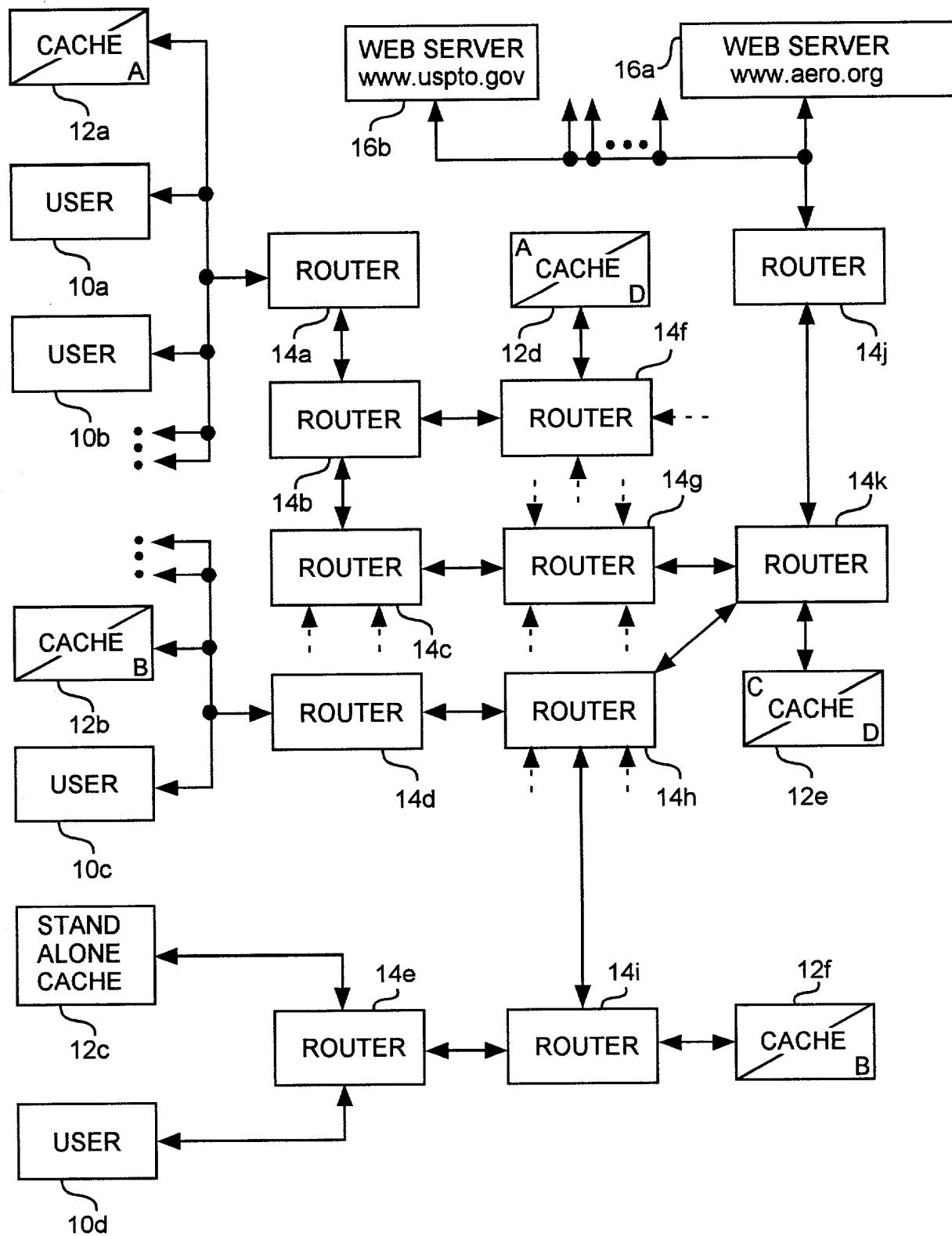
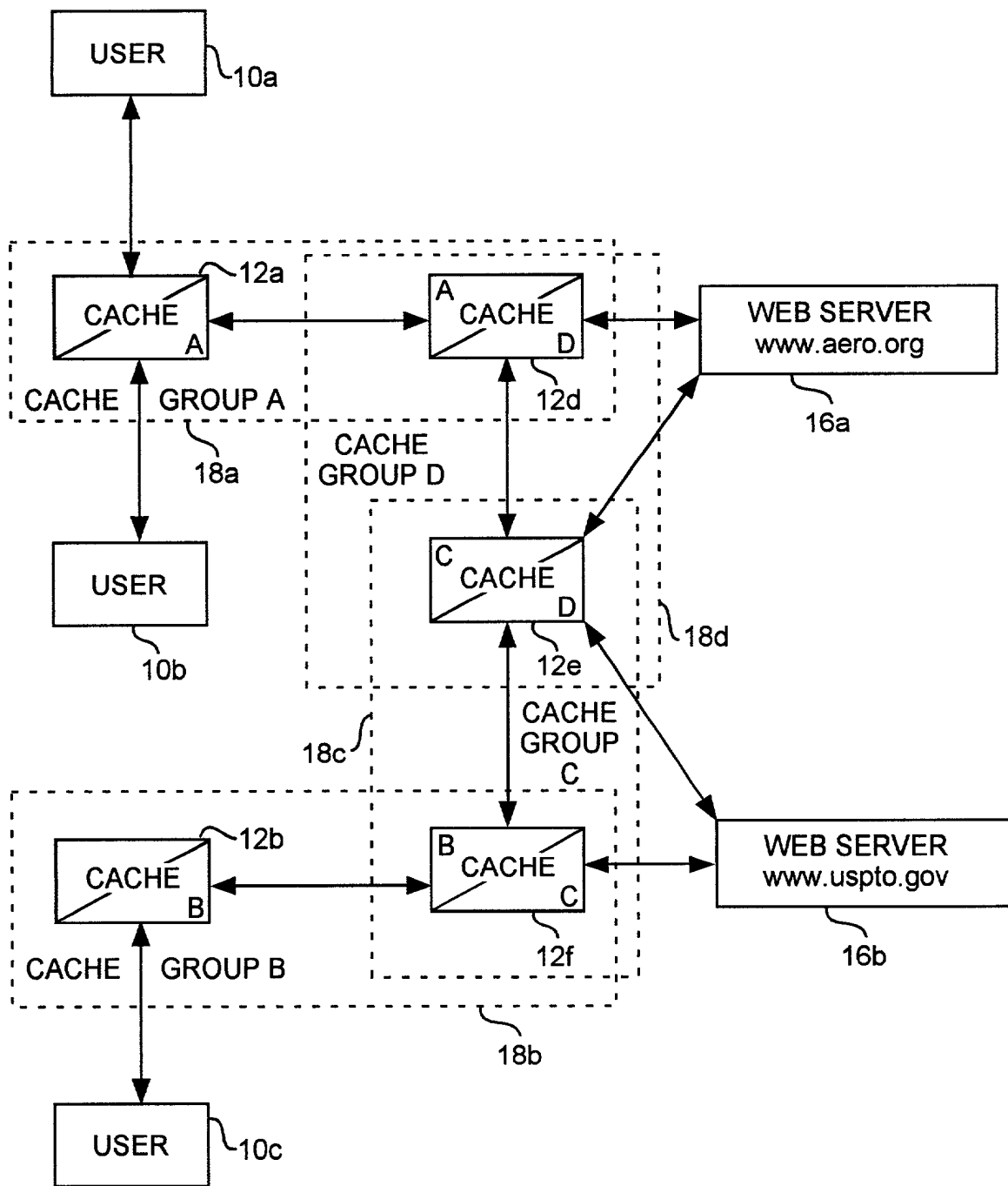


FIG. 1 is a block diagram of a user cache router and web server network. The network includes a central core of routers (14a-14i) interconnected in a mesh topology. On the left, a vertical bus (10a-10d) connects users (10a-10d) and caches (12a-12c) to the core. On the right, a vertical bus (14j-14k) connects the core to another set of routers (14j-14k) which in turn connect to web servers (16a-16b). Caches 12d and 12e are also connected to the core routers. A 'STAND ALONE CACHE' (12c) is connected to router 14e. The web servers are labeled 'WEB SERVER www.uspto.gov' (16b) and 'WEB SERVER www.aero.org' (16a).

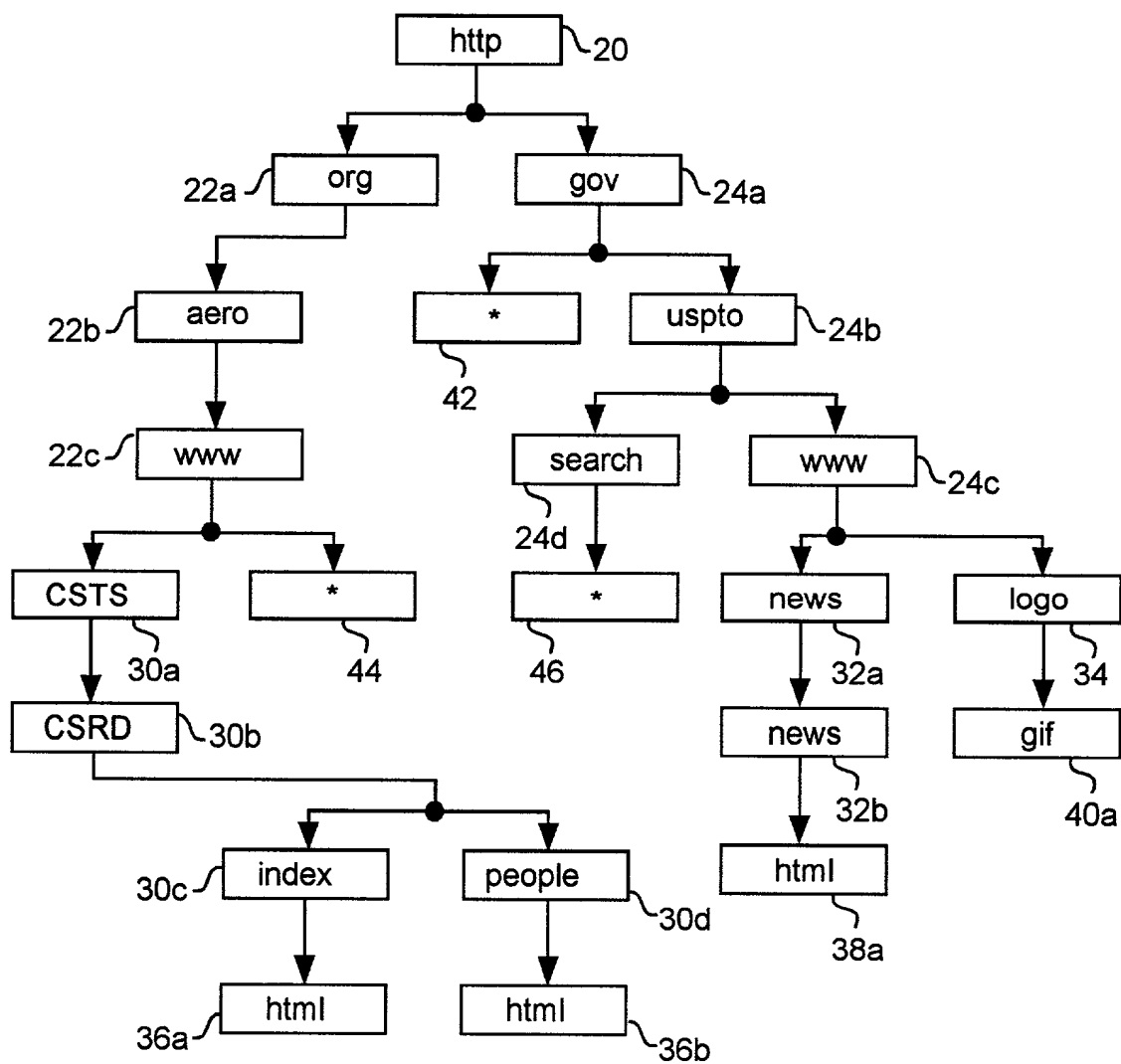


USER CACHE ROUTER AND WEB SERVER NETWORK
FIG. 1



APPLICATION-LEVEL NETWORK

FIG. 2



UNIVERSAL RESOURCE LOCATOR DECOMPOSITION TREE

FIG. 3

Hash Code	Component	Value
h1	http	0003df9d
h2	org	00074bea
h3	aero	00074587
h4	www	0006a081
h5	CSTS	000785e2
h6	CSRD	000424c2
h7	people.html	000465dc

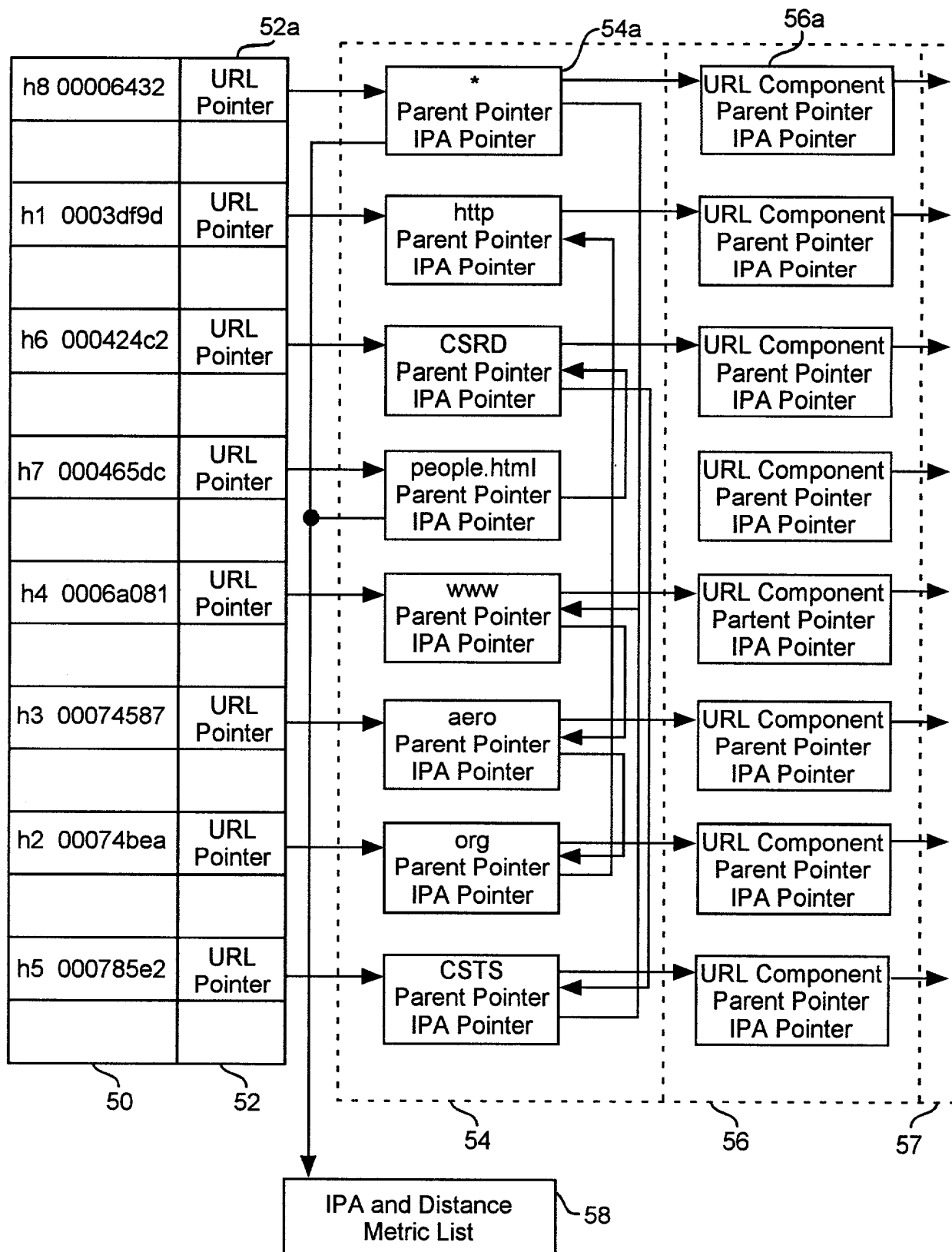
UNIVERSAL RESOURCE LOCATOR COMPONENT
HASH CODE VALUE TABLE

FIG. 4A

Hash Code	Component	Value
h1	http	0003df9d
h2	org	00074bea
h3	aero	00074587
h4	www	0006a081
h8	*	00006432

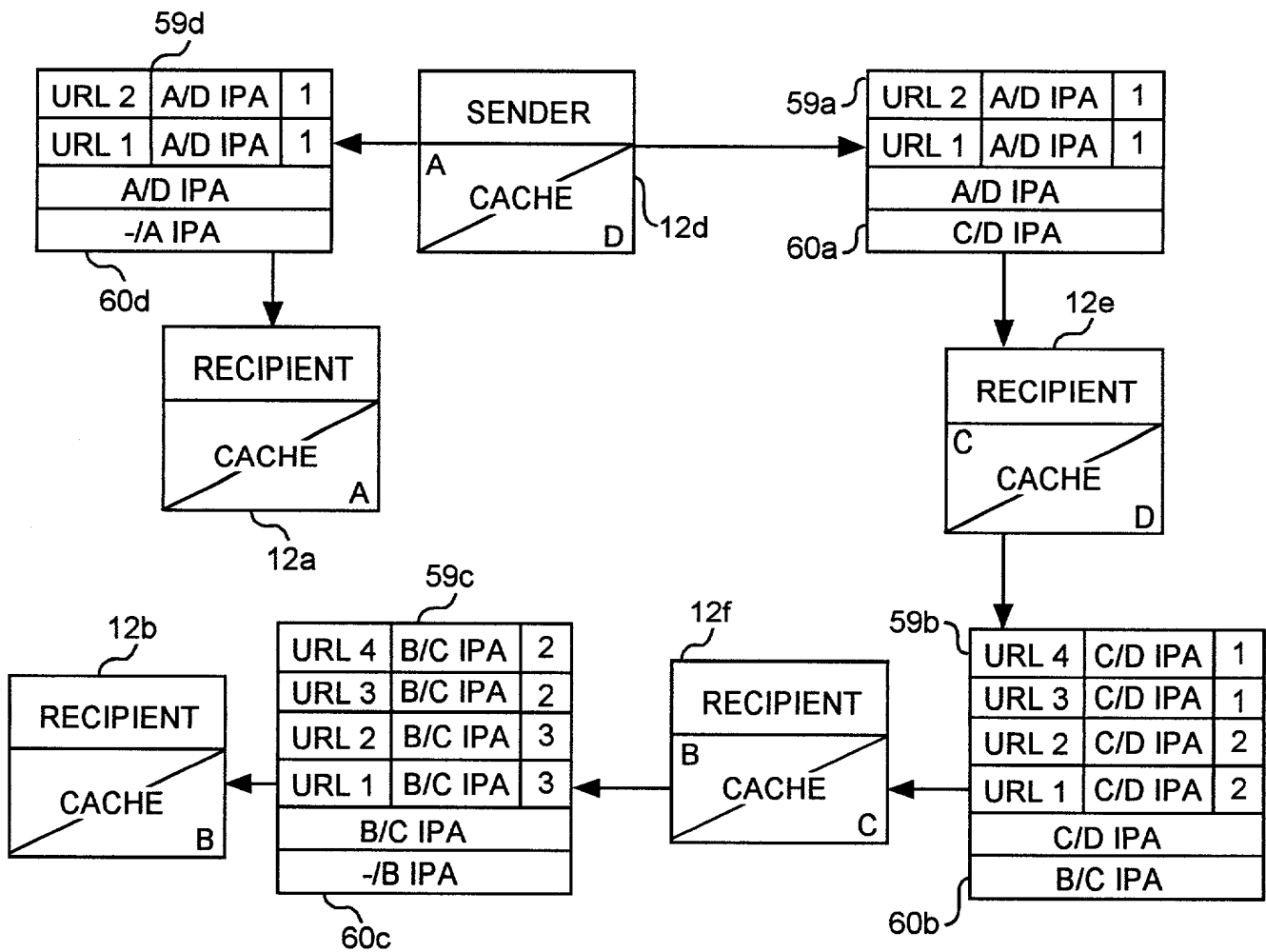
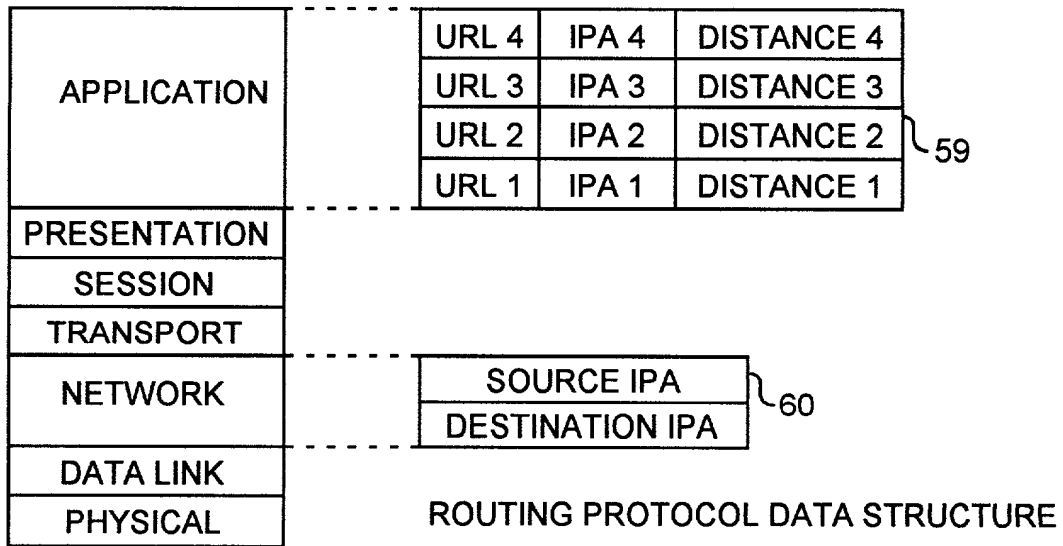
UNIVERSAL RESOURCE LOCATOR WILDCARD
COMPONENT HASH CODE VALUE TABLE

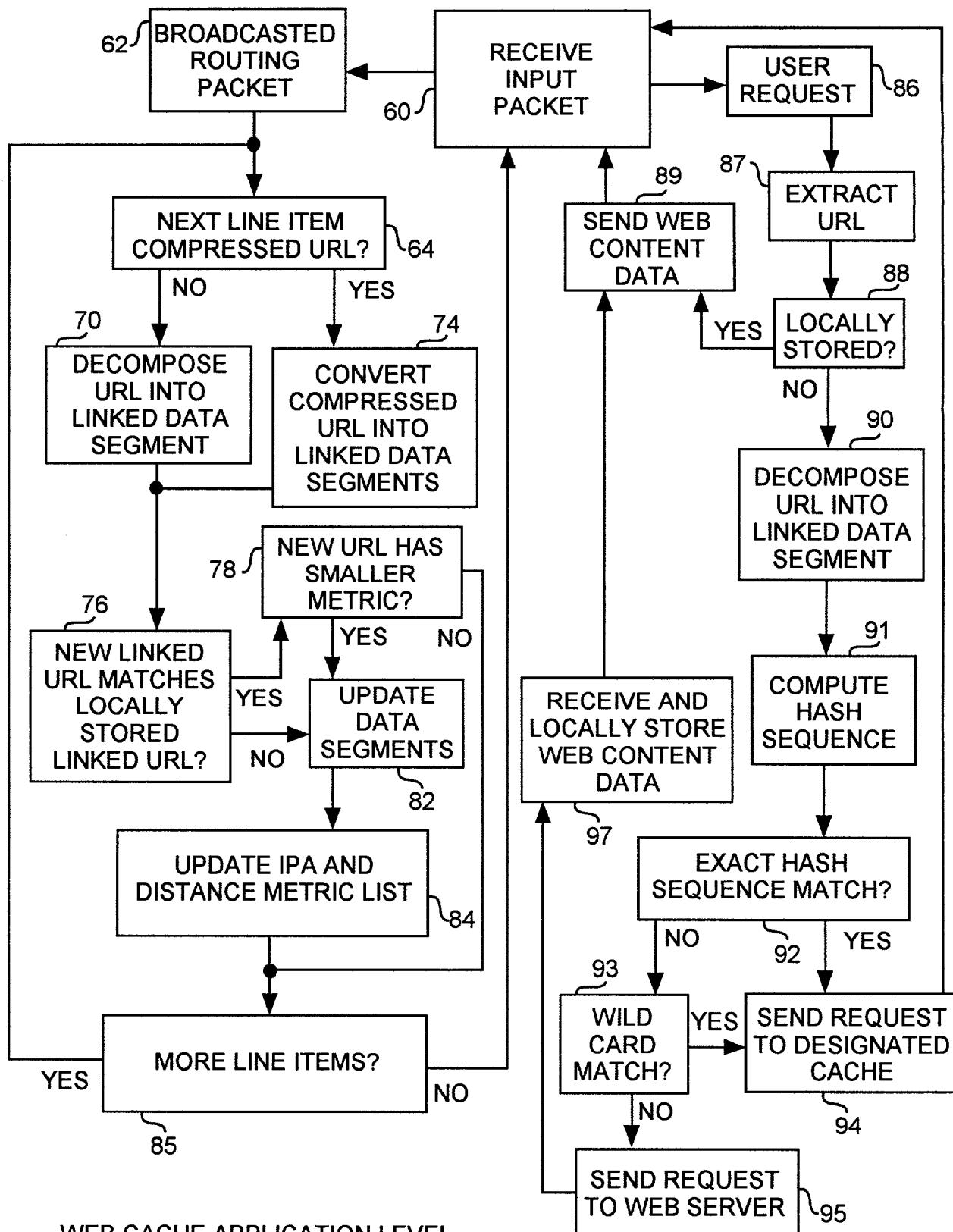
FIG. 4B



UNIVERSAL RESOURCE LOCATOR FORWARDING TABLE

FIG. 5





WEB CACHE APPLICATION LEVEL
ROUTING AND FORWARDING PROCESS

FIG. 7